Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Deployment of Wireline Services Offering Advanced Telecommunications Capability, *et al.*	)	CC Docket Nos. 98-147, 98-11, 98-26, 98-32, 98-15, 98-91, and CCB/CPD No. 98-15, RM 9244

OPPOSITION OF COVAD COMMUNICATIONS COMPANY TO PETITIONS FOR RECONSIDERATION

In an attempt to stamp out a chance of widespread local competition in residential and business markets, two Regional Bell Operating Companies—Bell Atlantic Corporation and SBC Communications, Inc. ("Petitioners")—have asked this Commission to reconsider critical aspects of the recent *Advanced Services Memorandum Opinion and Order*.[1] Covad Communications Company ("Covad") objects to these efforts.

These companies seek to undermine the very basis of Section 706 and the *Advanced Services* proceeding by arguing that they need not provide "conditioned" DSL-capable loops to competitors like Covad, even though they have been conditioning loops to provide digital services for years. Petitioners' claim that loop conditioning constitutes a "superior" service is both demonstrably false and legally flawed. At most, conditioning loops to support digital services is nothing more than a reasonable "modification" of

[1] Petition for Reconsideration of SBC Communications Inc., Southwestern Bell Telephone Company, Pacific Bell and Nevada Bell, CC Docket Nos. 98-147, 98-11, 98-26, 98-32, 98-78, 98-91, and CCB/CPD No. 98-15 RM 9244, filed Sept. 8, 1998; Petition for Reconsideration of Bell Atlantic Corp., CC Docket Nos. 98-147, 98-11, 98-26, 98-32, 98-78, 98-91, and CCB/CPD No. 98-15 RM 9244, filed Sept. 8, 1998 ("BA Petition").

ILEC outside plant which the Eighth Circuit explicitly stated was within the Commission's authority to require.

SBC and Bell Atlantic, which will potentially (if all proposed mergers are consummated) control over *60%* of the nation's access lines, have slapped the faces of consumers, the information technology industry, and CLECs by arguing that they need not provide loops capable of supporting high bandwidth services. These arguments stand in stark contrast to the press releases of these firms that promise advanced services to bandwidth-starved computer users. In these Petitions, SBC and Bell Atlantic continue their proud tradition of hostility to the information technology industry and competition—a tradition served every time an RBOC argues that Internet Service Providers must pay carrier access charges and every time an ILEC breaches the reciprocal compensation clauses of interconnection contracts simply because CLECs have been able to cater to the needs of Internet Service Providers better than ILECs.

Covad's comments in the *Advanced Services NPRM* discuss that ensuring that CLECs have the *parity of opportunity* to utilize fully the "features, functions and capabilities" of the existing outside plant is the key in implementing the goals of Section 706. Petitioners clearly reject that world and only seem interested in controlling and delaying the pace of DSL deployment by everyone—including CLECs—until Petitioners are "ready." The Internet community has been "ready" for high bandwidth last-mile solutions for years. The Commission should not condone this hostile attitude towards competitive DSL deployment.

I. ILECS CONDITION LOOPS FOR DIGITAL AND ANALOG SERVICES EVERY DAY

The Petitions utterly mischaracterize the manner in which the existing telephone network is built, used, and maintained. It is abundantly clear that *today*, ILECs, including Petitioners, "condition" their outside copper loop plant to maximize suitability of that plant for a variety of analog and digital services, such as POTS, ISDN, frame relay, and HDSL T1 services. Indeed, the type of conditioning work—such as removing an analog load coil or bridge tap and possibly a spectral interference check—that makes loops capable of supporting DSL services is precisely the same type of work the ILECs undertake to provide an ISDN line, a frame relay circuit or a T1 line that uses HDSL technology.[2] ILECs, in their ordinary course of business, perform these modifications every day on existing outside plant.[3]

For example, Pacific Bell/SBC's current interconnection agreement with Covad (and presumably other CLECs) defines *one* loop element for both ISDN and DSL uses—a "Digital ISDN/xDSL Capable Link."[4] Pacific Bell's ADSL tariff in California states

---

[2] ILECs have been deploying xDSL technology for years—just not to residential consumers. In particular, ILECs utilize HDSL to support T1 service to businesses. More than two years ago, Datarequest report stated that "[h]igh-speed digital subscriber line (HDSL) has continued to gain acceptance within telcos. . . . Some vendors are now targeting the residential market and proposing HDSL solutions for consumers." Eileen Healy, Dataquest Perspective PNEQ-NA 9601 - Apr 1996 (April 15, 1996) at 1.

[3] Indeed, as of October 6, 1997, Bell Atlantic had deployed 17,432 T1 lines in New York using HDSL technology. Letter from Maureen Thompson, Counsel, Bell Atlantic, to Dhruv Khanna, General Counsel, Covad, Case 97-C-1419 (Oct. 6, 1997). Covad learned that salient fact after filing a motion to compel after Bell Atlantic originally told a New York State Commission ALJ that it "does not currently provision to itself or offer ADSL- or HDSL-compatible links . . ." Letter from Maureen Thompson, Counsel, Bell Atlantic, to Hon. Jaclyn A. Brilling, Administrative Law Judge, New York Department of Public Service, Case 97-C-1419 at 5 (Sept. 16, 1997).

[4] Interconnection Agreement between Covad Communications Company and Pacific Bell, Section 2.1 (April 21, 1997). The fact that ISDN and DSL loops are often interchangeable has allowed Covad to uncover evidence of SBC discrimination in unbundled loop provisioning. Covad's Comments in SBC's 706 Petition earlier this year described how a Covad employee's order for a Covad DSL line was delayed because Pacific Bell/SBC claimed that a suitable loop was "unavailable". That employee subsequently ordered and obtained ISDN service from Pacific. After the employee's ISDN service was installed, Covad

that it will condition loops for its ADSL service (albeit for $900).[5] Some states, such as Texas, are actively looking at DSL conditioning issues. Other states, such as Illinois and Michigan, already have successfully dealt with these issues and have approved monthly loop rates for DSL loops, ISDN loops, and analog POTS loops that are nearly identical—indicating that under the scrutiny of sophisticated cost studies, there is no significant difference in the construction, modification, conditioning, maintenance, and repair costs of these outside plant network elements.

When an ILEC constructs its outside plant, it does not construct an "analog outside plant," it makes its network construction decision based upon a projected "mix" of POTS and high bandwidth services (HDSL T1, frame relay, ISDN). That construction decision is *also* based upon the projected labor costs of maintaining and converting that outside plant between analog and high bandwidth digital services. In this very real sense, the "existing" outside local loop plant facility includes a calculation of labor costs to modify, condition, maintain, and repair that plant for a particular use in a particular instance—the facility itself and management of that facility are not artificially separated.[6]

As a result, Bell Atlantic's argument that conditioning requirements would "turn[] every incumbent local exchange carrier into a construction company for its competitors . .

---

was able to successfully "cut over" its employee to Covad's DSL service. Comments of Covad Communications Company, CC Docket No. 98-91, filed June 24, 1998, at 7.

[5] Pacific Bell Telephone Company, Tariff FCC No. 128, Transmittal 1986 (June 15, 1998), at Section 17.7.4(B).

[6] The Eighth Circuit explicitly recognized that one cannot always separate "physical components" of a network and the software and human support involved in providing service. As a result, the court affirmed the Commission's decisions to unbundle directory assistance, operator services and OSS. *Iowa Util. Bd. v. FCC*, 120 F.3d 753 (8th Cir.), *cert. granted*, 118 S. Ct. 879 (1988). The Eighth Circuit explicitly stated that "the offering of telecommunications services encompasses more than just the physical components directly involved in the transmission of a phone call and includes the technology and information used to facilitate ordering, billing, and maintenance of phone service." *Id.* at 808.

. ." is based on a false dichotomy.[7] ILECs *already* are a substantial construction and maintenance company with regard to outside plant, and Section 251(c)(3) requires that the ILEC sell elements of that plant to CLECs. Outside plant maintenance, conditioning and construction costs are already factored into unbundled loop cost studies.

Indeed, the loop conditioning process is part of the routine work and "modifications" that ILECs perform on outside plant every day.[8] As described in Exhibit 2 to Covad's Comments in response to Pacific's 706 Petition in this docket,[9] the process of conditioning a loop to support DSL services is often nothing more than "de-conditioning" existing outside plant. The fact is that generally the most "low tech" of copper loops—an unencumbered twisted copper pair—best supports DSL services. The presence of analog load coils and repeaters on copper loops that "enhance" the analog POTS frequencies on those loops affirmatively halt transmission of other frequencies usable for higher bandwidth digital services.[10]

In addition, as described in Exhibit 2 to Covad's Comments in Pacific's 706 Comments, a bridge tap is a deployment option placed on a copper loop at the time of construction. That is, one twisted loop may have several "branches" (taps) to several neighborhoods, built by the ILEC because it cannot precisely know at the time of

---

[7] BA Petition at 4.

[8] As discussed below, the Eight Circuit explicitly stated that its decision on the "superior-quality" rules was not intended to prohibit the Commission from requiring "modifications to incumbent LEC facilities that are necessary to accommodate interconnection or access to network elements." *Iowa Util. Bd.*, 120 F.3d at 813 n.33.

[9] Covad Communications Company, *Defining Digital Loops*, Exhibit 2, Comments of Covad Communications Company, CC Docket No. 98-91, filed June 24, 1998. This paper may be found at http://www.covad.com/about/policy.html

[10] Bell Atlantic admits that these encumbrances "were installed to enable the exchange carrier to provide high-quality voice service to its customers . . ." BA Petition at 2.

construction how demand for loops between these neighborhoods will arise. When an ILEC builds a loop with a bridge tap, it had previously decided that it is more efficient to build multiple taps and later remove any excessive number of these taps in the future than face the risk of either over- or under-building "home run" (un-tapped) loops to several adjacent neighborhoods. If an ILEC denies a CLEC the full efficiency of this network construction decision—by not removing bridge taps for UNEs when necessary—the ILEC is denying that CLEC parity of access to those elements.

Only a telecom monopolist could argue that de-conditioning loops by *removing* analog encumbrances or bridge taps requires it to build a "superior network." The network is already built, it "exists"[11]—it is simply trapped inside the circuit-switched world of the ILECs. The ILECs have limited the communications potential of the network by their own actions, and enshrining those limitations is wholly contrary to Section 706's objective of bringing broadband capabilities to all Americans.

II. PETITIONERS' LEGAL ARGUMENTS ARE INCORRECT AND INCONSISTENT WITH THEIR OTHER CONTENTIONS

There are three fatal legal problems with Petitioners' legal arguments regarding the Commission's loop conditioning requirements

A. Requiring Loop Conditioning is a Reasonable "Modification" to Outside Plant Explicitly Recognized and Permitted by the *Iowa* Court

In striking the Commission's superior-quality rule, the Eighth Circuit explicitly stated that the Commission may write unbundling rules that require "modifications to

[11] As discussed below, the key component of the Eighth Circuit's decision to strike the superior-quality rule is that the court believed that the rule would require ILECs to provide access to an "unbuilt superior" network—not just access to the "*existing* network" of the ILEC. *Iowa Util. Bd.*, 120 F.3d at 813.

incumbent LEC facilities" to accommodate the provision of a UNE.[12] As made clear above, conditioning loops for digital and analog services are normal and routine outside plant modifications that occur every day on ILEC networks.

Petitioners have strained the Eighth Circuit's superior-quality ruling beyond credibility. The Eighth Circuit's superior-quality holding was clearly concerned about requirements that would require ILECs to build a "superior" network on demand or make "substantial" alterations to their networks.[13] The court's decision to restrict the Commission's ability to order construction of an "unbuilt superior network" is not relevant to conditioning unbundled loops, which is often necessary to utilize the full "features, functions and capabilities" of existing loop facilities.[14]

As the experience of Covad and other CLECs demonstrates, the "capabilities" of existing outside loop plant include a broad array of DSL services, and modifying outside plant to suit particular digital or analog services is part of the normal, every day operations of ILEC outside plant engineers and line workers. Requesting that an ILEC condition a particular loop is *not* asking the ILEC to build a "superior" network—it is only asking the ILEC to perform a routine modification that it performs every day on the "existing" network. Such a requirement was fully contemplated and permitted by the *Iowa* court.[15]

---

[12] *Iowa Util. Bd.*, 120 F.3d at n.33.

[13] *Iowa Util. Bd.*, 120 F.3d at 813 ("section 251(c)(3) implicitly requires unbundled access only to an incumbent LEC's existing network—not to a *yet unbuilt superior one*") (emphasis added); *id.* at n.33 ("we strike down the Commission's rules requiring incumbent LECs to alter *substantially* their networks", but FCC rules that require "modifications to incumbent LEC facilities" remain in place) (emphasis added).

[14] Section 153(29) of the Communications Act defines a "network element" to "include [the] features, functions, and capabilities that are provided by means of such facility . . ." 47 U.S.C. § 153(29).

[15] Indeed, the *Iowa* court did not even mention loop conditioning as being required by the FCC's "superior-quality" rule. *Iowa Util. Bd.*, 120 F.3d at 813 (stating only that section 251(c)(3) "implicitly

B. Petitioners Can No Longer Appeal the Conditioning Requirement

Petitioners' arguments are not timely, because the conditioning requirement dates back over two years, to the Commission's August 8, 1996 *First Local Competition Order*. The *Advanced Services M&O* only clarified those existing requirements—in large part because it was demonstrated that ILECs (including SBC and Bell Atlantic) had not fully complied with those rules. Petitioners had their opportunity to dispute the conditioning requirement more than two years ago and chose not to do so until now—only after CLECs began to request unbundled conditioned loops in earnest.

SBC and Bell Atlantic cannot ignore these rules for two years and then seek to have them reversed only after the Commission indicates its willingness to enforce these rules. The time to appeal the *First Local Competition Order* has long since passed.

C. Petitioners' Section 706 Legal Theories are Internally Inconsistent

Both Petitions argue that the Commission has the independent authority under Section 706 to forbear from the requirements of Sections 251 and 271. If that legal theory is true, the Commission must also have the independent authority under Section 706 to order other "measures to promote competition" to advance those same goals.[16] That is, the Commission would have the independent authority under Section 706 to order ILECs to condition unbundled loops to support all forms of xDSL services—without regard to any "implicit" prohibition on "superior-quality" elements inherent in Section 251(c)(3). Petitioners cannot have it both ways.

---

requires unbundled access only to an incumbent LEC's *existing* network—not to a yet unbuilt superior one."). The Eighth Circuit was concerned that the FCC's rule would permit CLECs to request that new networks be built at the whim of the CLEC—for example, construction of fiber rings or installation of an expensive digital switch where no digital switch exists.

[16] 47 U.S.C. § 157nt.

III. CONCLUSION

The Web pages of SBC, Bell Atlantic and other ILECs are littered with "announcements" of DSL services by these incumbent LECs, conveying the message to their local customers that ubiquitous ADSL is "on the way." However, the fact that SBC and Bell Atlantic are spending effort in this proceeding demonstrates that these carriers *are not* committed to widespread DSL deployment.

The legal theory advanced by SBC and Bell Atlantic here would permit them to prevent CLEC deployment of competitive DSL services to neighborhoods and homes where SBC and Bell Atlantic are not deploying DSL services. If SBC and Bell Atlantic were actually interested in deploying DSL *throughout* their service territories, there is no reason for them to seek this DSL deployment veto—because Petitioners would be conditioning loops for DSL service throughout their service territories.

Through the legal posturing of these Petitions, SBC and Bell Atlantic reveal a strategy inimical to the goals of Section 706. These future custodians of 60% of the nation's local telephone network do not want to deploy DSL service ubiquitously, they want to limit CLEC deployment of DSL to certain geographic regions, and they only will provide targeted DSL service in a way that does not threaten existing subsidies and expensive T1 and similar services.

American consumers deserve competitive advanced services immediately, and CLECs are poised to provide these services. Granting these Petitions would condemn the deployment of these crucial next-generation services to the whim of ILECs—precisely the opposite of what Congress intended Sections 251 and 706 to accomplish.

Respectfully submitted,

Thomas M. Koutsky

Thomas M. Koutsky
Assistant General Counsel
Covad Communications Company
6849 Old Dominion Drive, Suite 220
McLean, VA 22101
Tel: (703) 734-3870
Fax: (703) 734-5474
http://www.covad.com

October 5, 1998

CERTIFICATE OF SERVICE

I, Brian J. McHugh, hereby certify that on this 5th day of October 1998 copies of the foregoing *Opposition of Covad Communications Company to Petitions for Reconsideration* were served by first class mail, postage prepaid, on the individuals on the attached service list.

Brian McHugh

Brian J. McHugh

ITS INC
1231 20TH STREET
GROUNDFLOOR
WASHINGTON, DC 20036

RICHARD TARANTO
FARR & TARANTO
BELL ATLANTIC
1850 M STREET NW
SUITE 1000
WASHINGTON DC 20036

ROBERT B MCKENNA
JEFFRY A BRUEGGEMAN
U S WEST INC
1020 19TH ST NW
WASHINGTON DC 20036

PIPER & MARBURY LLP
RONALD L PLESSER.
MARK J O'CONNOR
STUART P INGIS
SEVENTH FLOOR
1200 NINETEENTH ST NW
WASHINGTON DC 20036

BARTLETT L THOMAS
JAMES J VALENTINO
MINTZ LEVIN COHN FERRIS
GLOVSKY AND POPEO
701 PENNSYLVANIA AVE NW STE 900
WASHINGTON DC 20004-2608

JAMES R YOUNG
EDWARD D YOUNG III
MICHAEL E GLOVER
BELL ATLANTIC
1320 NORTH COURT HOUSE ROAD
8TH FLOOR
ARLINGTON VA 22201

JOHN T LENAHAN
CHRISTOPHER HEIMANN
FRANK MICHAEL PANEK
GARY PHILLIPS
AMERITECH
2000 WEST AMERITECH CENTER DR
ROOM 4H84
HOFFMAN ESTATES IL 60196-1025

JANICE M MYLES
COMMON CARRIER BUREAU
FEDERAL COMMUNICATIONS COMMISSION
1919 M ST NW ROOM 544
WASHINGTON DC 20554

CHARLES C HUNTER
HUNTER COMMUNICATIONS LAW GROUP
1620 I STREET NW STE 701
WASHINGTON DC 20006

JONATHAN E CANIS
KELLEY DRYE & WARREN LLP
1200 19TH ST NW STE 500
WASHINGTON DC 20544

CHRISTOPHER W SAVAGE
JAMES F IRELAND
COLE RAYWID & BRAVERMAN LLP
1919 PENNSYLVANIA AVE NW STE 200
WASHINGTON DC 20006

JENNER & BLOCK
ANTHONY C EPSTEIN
COUNSEL FOR MCI TELECOMM CORP
601 THIRTEENTH STREET NW
WASHINGTON DC 20005

JONATHAN JACOB NADLER
SQUIRE SANDERS & DEMSEY
1201 PENNSYLVANIA AVE NW
BOX 407
WASHINGTON DC 20044

HENRY GELLER
ALLIANCE FOR PUBLIC TECHNOLOGY
901 15TH ST NW STE 230
WASHINGTON DC 20005

NATIONAL ASSOCIATION OF COMMISSIONS FOR WOMEN
1828 L STREET NW STE 250
WASHINGTON DC 20036

KECIA BONEY
DALE DIXON
LISA SMITH
MCI TELECOMMUNICATIONS CORPORATION
1801 PENNSYLVANIA AVE NW
WASHINGTON DC 20006

MCI COMMUNICATIONS
KEVIN SIEVERT
GLEN GROCHOWSKI
LOCAL NETWORK TECHNOLOGY
400 INTERNATIONAL PARKWAY
RICHARDSON TX 75081

LEON M KESTENBAUM
JAY C KEITHLEY
SPRINT CORPORATION
1850 M STREET NW
WASHINGTON DC 20036

UNITED HOMEOWNERS ASSOCIATION
1511 K STREET NW
WASHINGTON DC 20005

NATIONAL HISPANIC COUNCIL ON AGING
2713 ONTARIO ST NW
WASHINGTON DC 20009

NATIONAL ASSOCIATION OF
DEVELOPMENT ORGANIZATIONS
444 NORTH CAPITOL ST NW STE 630
WASHINGTON DC 20001

PETER ROHRBACH
LINDA L OLIVER
DAVID L SIERADZKI
HOGAN & HARTSON LLP
COLUMBIA SQUARE
555 THRTEENTH ST NW
WASHINGTON DC 20004

UNITED STATES TELEPHONE ASSOCIATION
LINDA KENT
KEITH TOWNSEND
1401 H STREET NW STE 600
WASHINGTON DC 20005

COLLEEN BOOTHBY
LEVIN BLASZAK BLOCK AND
BOOTBHY LLP
2001 L STREET NW STE 900
WASHINGTON DC 20036

WORLD INSTITUTE ON DISABILITY
510 16TH ST STE 100
OAKLAND CA 94612

ANNE K BINGAMAN
DOUGLAS W KINKOPH
BOB MATHEW
LCI INTERNATIONAL CORP
8180 GREENSBORO DRIVE SUITE 800
MCLEAN VA 22102

TERRENCE K FERGUSON
SR. VP AND GENERAL COUNSEL
LEVEL 3 COMMUNICATIONS INC
3555 FARNAM STREET
OMAHA NE 68131

RUSSELL M BLAU
RICHARD M RINDLER
SWIDLER & BERLIN CHTD
3000 K ST NW STE 300
WASHINGTON DC 20007

GAIL L POLIVY
GTE SERVICE CORPORATION
1850 M STREET NW
SUITE 1200
WASHINGTON DC 20036

DAVID N PORTER
WORLDCOM INC
1120 CONNECTICUT AVE NW
STE 400
WASHINGTON DC 20036

RANDALL B LOWE
PIPER & MARBURY LLP
1200 NINETEENTH ST NW
WASHINGTON DC

GENEVIEVE MORELLI
EXECUTIVE VP AND GENERAL COUNSEL
THE COMPETITIVE TELECOMMUNICATIONS
ASSOCIATION
1900 M STREET NW STE 800
WASHINGTON DC 20036

RICHARD D MARKS ESQ
VINSON & ELKINS LLP
1455 PENNSYLVANIA AVE NW
SUITE 700
WASHINGTON DC 20004-1008

J MANNING LEE
VICE PRESIDENT REGULATORY AFFAIRS
TELEPORT COMMUNICATIONS GROUP INC
TWO TELEPORT DRIVE
STATEN ISLAND NY 10311

CHERYL L PARRINO
CHAIRMAN
PUBLIC SERVICE COMMISSION OF WISCONSIN
P O BOX 7854
MADISON WI 53707-7854

G RICHARD KLEIN
COMMISSIONER
INDIANA UTILITY REGULATORY COMMISSIO~
302 W WASHINGTON STE E-306
INDIANAPOLIS IN 46204

MARK C ROSENBLUM
AVA B KLEINMAN
AT&T CORP
295 NORTH MAPLE AVENUE
ROOM 3252JI
BASKING RIDGE NJ 07920

M ROBERT SUTHERLAND
BELLSOUTH CORPORATION
1155 PEACHTREE ST NE
ATLANTA GA 30309-3610

GEORGE VRADENBURG III
AMERICA ONLINE INC
1101 CONNECTICUT AVE NW
STE 400
WASHINGTON DC 20036

NYSERNET INC
DR DAVID LYTEL
125 ELWOOD DAVIS ROAD
SYRACUSE NY 13212

STEVEN GOROSH
VICE PRESIDENT & GENERAL COUNSEL
NORTHPOINT COMMUNICATIONS INC
222 SUTTER STREET
SAN FRANCISCO CA 94108

JOSEPH W WAZ JR
VICE PRESIDENT EXTERNAL AFFAIRS &
PUBLIC POLICY COUNSEL
COMCAST CORPORATION
1500 MARKET STREET
PHILADELPHIA PA 19102

CHARLES D GRAY
GENERAL COUNSEL
NARUC
1100 PENNSYLVANIA AVE STE 608
P 0 BOX 684
WASHINGTON DC 20044

D ROBERT WEBSTER
BAMBERGER & FEIBLEMAN
COUNSEL FOR THE NATIONAL BLACK
CHAMBER OF COMMERCE
54 MONUMENT CIRCLE STE 600
INDIANAPOLIS IN 46204

JAMES R COLTHARP
SENIOR DIRECTOR PUBLIC POLICY
COMCAST CORPORATION
1317 F STREET NW
WASHINGTON DC 20004

ALBERT H KRAMER
MICHAEL CAROWITZ
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP
2101 L STREET NW
WASHINGTON DC 20037-1526

CHAPIN BURKS
PRESIDENT
ST GEORGE AREA CHAMBER OFCOMMERCE
97 EAST ST GEORGE BLVD
ST GEORGE UTAH 84770

JOEL BERNSTEIN
HALPRIN TEMPLE GOODMAN &
SUGRUE
1100 NEW YORK AVE NW
SUITE 650 EAST
WASHINGTON DC 20005

CHRISTOPHER J WHITE
DEPUTY ASSISTANT RATEPAYER. ADVOCATE
THE STATE OF NEW JERSEY
DIVISION OF THE RATEPAYER. ADVOCATE
31 CLINTON STREET 11 FLOOR
NEWARK NJ 07101

ROBERT D BOYSEH
PRESIDENT
LARAMIE ECONOMIC DEVELOPMENT CORP
1482 COMMERCE DRIVE STE A
LARAMIE WY 82070

KAREN PELTZ STRAUSS
LEGAL COUNSEL FOR TELECOMMUNICATION',
POLICY
NATIONAL ASSOCIATION FOR THE DEAF
814 THAYER AVE
SILVER SPRING MD 20910-4500

JOHN HANES
CHAIRMAN
HOUSE CORPORATION
WYOMING STATE LEGISLATURE
213 STATE CAPITOL
CHEYENNE WY 82008

CHERIE R KISER
MICHAEL B BRESSMAN
MINTZ LEVIN COHN FERRIS
GLOVSKY AND POPEO PC
701 PENNSYLVANIA AVE NW
STE 900
WASHINGTON DC 20004

JACK CREWS
CHEYENNE LEADS
1720 CAREY AVENUE STE 401
P 0 BOX 1045
CHEYENNE WY 82003-1045

C BENNETT LEWIS
EXECUTIVE DIRECTOR
AURORA CHAMBER OF COMMERCE
3131 SOUTH VAUGNWAY STE 426
AURORA CO 80014

THOMAS GANN
SUN MICROSYSTEMS INC
13001 STREET NW STE 420 EAST
WASHINGTON DC 20005

RUSSELL STAIGER
BISMARK/MANDAN DEVELOPMENT ASSN
400 E BROADWAY AVE STE 417
BISMARK ND 58502

JOSEPH K WITMER
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P 0 BOX 3265
COMMONWEALTH AVE & NORTH
ROOM 116
HARRISBURG PA 17105-3265

NATIONAL ASSOCIATION OF COMMUNITY
ACTION AGENCIES
1100 17TH ST NW STE 500
WASHINGTON DC 20036

J JEFREY OXLEY
MINNESOTA DEPARTMENT OF PUBLIC
SERVICE
1200 NCL TOWER
445 MINNESOTA STREET
ST PAUL MN 55101-2130

ECONOMIC STRATEGY INSTITUTE
1401 H STREET NW
SUITE 750
WASHINGTON DC 20005

GENE VUCKOVICH
EXECUTIVE DIRECTOR
MONTANTA RURAL DEVELOPMENT PARTNEREL
115 E SEVENTH STREET SUITE 2A
ANACONDA MT 59711

ISSUE DYNAMICS INC
901 15TH STREET STE 230
WASHINGTON DC 20005

ELLEN DEUTSCH
SENIOR COUNSEL
ELECTRIC LIGHTWAVE INC
8 100 NE PARKWAY DRIVE
SUITE 200
VANCOUVER WA 98662

THOMAS HATCH
HOUSE OF REPRESENTATIVES
STATE OF UTAH
P 0 BOX 391
PANGUITCH UT 84759

ELECTRIC LIGHTWAVE INC
LEGAL COUNSEL
4400 77TH AVE
VANCOUVER WA 98662

J MANNING LEE
TELEPORT COMMUNICATIONS GROUP INC
TWO TELEPORT DRIVE STE 300
STATEN ISLAND NY 10311

GENEVIEVE MORELLI
EXECUTIVE VICE PRESIDENT
AND GENERAL COUNSEL
COMPETITIVE TELECOMMUNICATIONS
ASSOCIATION
1900 M STREET NW SUITE 800
WASHINGTON DC 20036

BARBARA A DOOLEY
EXECUTIVE DIRECTOR
COMMERCIAL INTERNET eXchange ASSOC
1041 STERLING ROAD
SUITE 104A
HERNDON VA 20170

KEITH TOWNSEND
UNITED STATES TELEPHONE ASSOCIATION
1401 H STREET NW STE 600
WASHINGTON DC 20005

RILEY M MURPHY
VICE PRESIDENT AND GENERAL COUNSEL
E SPRIRE COMMUNICATIONS INC
131 NATIONAL BUSINESS PARKWAY
SUITE 100
ANNAPOLIS JUNCTION MD 20701

ROBERT W MCCAUSLAND
VICE PRESIDENT REGULATORY AND
INTERCONNECTION
ALLEGIANCE TELECOM
950 STEMMONS FREEWAY STE 3026
DALLAS TX 75207-3118

KEVIN TIMPANE
VICE PRESIDENT PUBLIC POLICY
FIRSTWORLD, COMMUNICATIONS INC
9333 GENESSEE AVENUE STE 200
SAN DIEGO CA 92121

BRAD E MUTSCHELKNAUS
MARIEANN Z MACI-HDA
KELLEY DRYE & WARREN LLP
1200 19TH STREET NW
SUITE 500
WASHINGTON DC 20036

CATHERINE R SLOAN
RICHARD L FRUCHTERMAN III
RICHARD S WHITT
WORLDCOM INC
1120 CONNECTICUT AVE NW
SUITE 400
WASIENGTON DC 20036

JONATHAN E CANIS
ERIN M REILLY
KELLEY DRYE & WARREN LLP
1200 19TH ST NW STE 500
WASHINGTON DC 20554

DAVID J NEWBURGER.
NEWBURGER & VOSSMEYER
ONE MET'ROPOLITAN SQUARE
SUITE 2400
ST LOUIS MO 63102

CINDY Z SCHONHAUT
SENIOR VICE PRESIDENT OF GOVERNMENT
AFFAIRS & EXTERNAL AFFAIRS
ICG COMMUNICATIONS INC
161 INVERNESS DRIVE
ENGLEWOOD CO 80112

DANA FRIX
KEMAL M HAWA
SWIDLER & BERLIN CHTD
3000 K STREET NW STE 300
WASHINGTON DC 20007-5116

W SCOTT MCCOLLOUGH
MCCOLLOUGH AND ASSOCIATES PC
1801 NORTH LAMAR STE 104
AUSTIN TX 78701

RUSSELL M BLAU
SWIDLER & BERLIN CHTD
3000 K STREET NW STE 300
WASHINGTON DC 20007

STEVEN M HOFFER
COALITION REPRESENTING INTERNET
SERVICE PROVIDERS
95 MARINER GREEN DR
CORTE MADERA CA 94925

LAWRENCE G MALONE
GENERAL COUNSEL
STATE OF NEW YORK DEPARTMENT OF
PUBLIC SERVICE
THREE EMPIRE STATE PLAZA
ALBANY NY 12223-1350

L MARIE GUILLORY
NATIONAL TELEPHONE COOPERATIVE
ASSOCIATION
2626 PENNSYLVANIA AVE NW
WASHINGTON DC 20037

PETER ARTH JR
WILLIAM N FOLEY
MARY MACK ADU
505 VAN NESS AVE
SAN FRANCISCO CA 94102

MAUREEN LEWIS
GENERAL COUNSEL
ALLIANCE FOR PUBLIC TECHNOLOGY
901 15TH ST NW STE 230
WASHINGTON DC 20038-7146

RONALD L PLESSER.
MARK J 0 CONNOR
PIPER & MARBURY LLP
COUNSEL FOR COMNIERCIAL INTERNET
EXCHANGE ASSOCIATION
1200 NINETEENTH ST NW
WASHINGTON DC 20036

ANGELA LEDFORD
KEEP AMERICA CONNECTED!
P 0 BOX 27911
WASHINGTON DC 20005

ERIC R OLBETER
ECONOMIC STRATEGY INSTITUTE
1401 H STREET NW STE 750
WASHINGTON DC 20005

KAREN PELTZ STRAUSS
LEGAL COUNSEL FOR TELECOMMUNICATIONS
POLICY
NATIONAL ASSOCIATION OF THE DEAF
814 THAYER AVENUE
SILVER SPRING MD 20910-4500

CHARLES D GRAY
GENERAL COUNSEL
NATIONAL ASSOCIAT10N OF REGULATORY
UTILITY CONMSSIONERS
1100 PENNSYLVANIA AVENUE STE 609
P 0 BOX 684
WASHINGTON DC 20044

MARY MCDERMOTT
UNITED STATES TELEPHONE ASSOCIATION
1401 H STREET NW STE 600
WASHINGTON DC 20005

DR JANET K POLEY
UNIVERSITY OF NEBRASKA
C218 ANIMAL SCIENCES
P 0 BOX 830952
LINCOLN NE 68583-0952

DAVID W ZEISIGER
DONN T WONNELL
INDEPENDENT TELEPHONE &
TELECOMMUNICATIONS ALLIANCE
1300 CONNECTICUT AVE NW STE 600
WASHINGTON DC 20036

JEFFREY A CAMPBELL
STACEY STERN ALBERT
COMPAQ COMPUTER CORPORATION
1300 I STREET NW
WASHINGTON DC 20005

GORDON M AMBACH
EXECUTIVE DIRECTOR
COUNCIL OF CHIEF STATE SCHOOL OFFICERS
ONE MASSACHUSETTS AVE NW
SUITE 700
WASHINGTON DC

MARK J TAUBER
TERESA S WERNER
PIPER & MARBURY LLP
1200 19TH ST NW SEVENTH FLOOR
WASHINGTON DC 20036

CEDAR CITY/IRON COUNTY ECONOMIC DEV
I 10 N MAIN ST5REET
P 0 BOX 249
CEDAR CITY UTAH 84720

NEXTLINK COMMUNICATIONS INC
R. GERARD SALEMME
SENIOR VICE PRESIDENT EXTERNAL AFFAIRS AND
INDUSTRY RELATIONS
1730 RHODE ISLAND AVE NW
SUITE 1000
WASHINGTON DC 20036

RODNEY L JOYCE
J THOMAS NOLAN
SHOOK HARDY & BACON
801 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004-2615

JOHN WINDHAUSEN JR
GENERAL COUNSEL
COMPETITION POLICY INSTITUTE
1156 15TH ST NW STE 3 10
WASHINGTON DC 20005

NATIONAL ASSOCIATION OF DEVELOPMENT
ORGANIZATIONS
444 NORTH CAPITOL STREET NW STE 630
WASHINGTON DC 20001

SCOTT TRUMAN
EXECUTIVE DIRECTOR
UTAH RURAL DEVELOPMENT COUNCEL
ADMINISTRATION BUILDING 304
SOUTHERN UTAH UNIVERSITY
CEDAR CITY UT 84720

THOMAS J DUNLEAVY
NEW YORK DEPARTMENT OF PUBLIC SERVICE
THREE EMPIRE STATE PLAZA
ALBANY NY 12223-1350

GERALD STEVENS-KITTNER
CAI WIRELESS SYSTEMS INC
2101 WILSON BOULEVARD STE 100
ARLINGTON VA 22201

A DANIEL SCHEINMAN
LAURA K IPSEN
CISCO SYSTEMS INC
170 WEST TASMAN DRIVE
SAN JOSE CA 95134-1706

WILLIAM J ROONEY JR
GLOBAL NAPS INC
TEN WINTHROP SQUARE
BOSTON MA 02110

JAMES D. ELLIS
DARRYL W. HOWARD
SBC COMMUNICATIONS
ONE BELL CENTER
ROOM 3528
ST. LOUIS, MO 63101

LAWRENCE W. KATZ
BELL ATLANTIC
1320 NORTH COURT HOUSE ROAD
8th FLOOR
ARLINGTON, VA 22201